## **ABSTRACT**

[0081] A computer program product for simulating the performance of an electrical power system. The computer program product consists of a computer-readable medium containing an electrical power system model module, an input module and a simulation engine. The electrical power system model module contains one or more electrical power system models consisting of interrelated blocks and connections. The blocks represent elements comprising electrical circuits, electromechanical devices, and measurement devices, and the relationships between said blocks and said connections in said model are read-only with respect to an end user. The input module is operable on a computer to allow an end user to specify at least one characteristic for at least one said block in said model. The simulation engine is operable on a computer to simulate the performance of an electrical power system represented by the model using the specified block characteristics.